

## **EXHIBIT 2**

**UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF TENNESSEE  
NASHVILLE DIVISION**

KAYLA GORE; JAIME COMBS; L.G.; and  
K.N.,

*Plaintiffs,*

v.

WILLIAM BYRON LEE, in his official  
capacity as Governor of the State of  
Tennessee; and LISA PIERCEY, in her  
official capacity as Commissioner of the  
Tennessee Department of Health,

*Defendants.*

No. 3:19-CV-00328

DISTRICT JUDGE RICHARDSON  
MAGISTRATE JUDGE HOLMES

**EXPERT DECLARATION OF DR. SHAYNE SEBOLD TAYLOR, M.D.**

I, Dr. Shayne Sebold Taylor, declare as follows:

1. I submit this expert declaration based on my personal knowledge.
2. I have been retained by counsel for Plaintiffs as an expert in connection with the above-captioned litigation.
3. I have actual knowledge of the matters stated herein. If called to testify in this matter, I would testify truthfully and based on my expert opinion.

**QUALIFICATIONS AND BASIS OF OPINION**

4. I am an Assistant Professor of Internal Medicine and Pediatrics at Vanderbilt University Medical Center and the Monroe Carrol Jr. Children's Hospital at Vanderbilt in Nashville, Tennessee.
5. I am licensed in the state of Tennessee to practice medicine (TN License #55151).

6. I am board certified in both Internal Medicine and Pediatrics by the American Board of Internal Medicine and the American Board of Pediatrics, respectively.

7. I obtained my undergraduate degree at Emory University with a BS in Biology and a BA in Women and Gender Studies. I received my medical degree from Drexel University College of Medicine and completed my Internal Medicine and Pediatrics residencies at Vanderbilt University Medical Center.

8. I have lived and practiced medicine in state of Tennessee since 2014.

9. Additional information about my professional background and experience is outlined in my curriculum vitae, a true and accurate copy of which is attached as Exhibit A to this declaration.

10. In conjunction with serving as an Assistant Professor of Internal Medicine and Pediatrics at Vanderbilt, I am the creator and Lead Clinician of the Vanderbilt Clinic for Transgender Health, a multi-disciplinary patient-centered medical home for transgender adults. My clinical duties include providing primary care and transition-related care (particularly hormone therapy), as well as providing care navigation with specialists across the Vanderbilt medical community.

11. I have over 300 transgender patients under my care with a 3-6 month waitlist to be seen for services. The majority of my patients reside in Middle Tennessee, however I have patients traveling 3-4 hours to come to the clinic spanning from Memphis to the west and Kingsport to the east. Additionally, I estimate that about 15% of my patients are traveling from neighboring states, including Kentucky, Alabama and even Indiana.

12. In addition to my clinical work, I provide guidance to physicians throughout Vanderbilt and Middle Tennessee who care for transgender patients. I do this by giving grand

rounds, presentations to medical students and residents, and training to various community providers on the importance of culturally competent care for the transgender patient.

13. As part of my practice, I stay current on medical research and literature relating to the care of transgender persons and patients suffering with gender dysphoria.

14. I am a member of the World Professional Association of Transgender Health (WPATH), American Academy of Pediatrics (AAP), American College of Physicians (ACP), the Alpha Omega Alpha (AOA) medical honor's society, and the Gay and Lesbian Medical Association (GLMA).

15. This declaration sets forth my opinions in this case and the basis for my opinions. The materials I have relied upon in preparing this declaration are the same types of materials that experts in my field of study regularly rely upon when forming opinions on the subject. I have not examined the Plaintiffs in this case. In preparing this declaration, I have reviewed the materials listed in the bibliography attached as Exhibit B to this declaration. I also rely on my years of clinical experience caring for transgender adults and children, and my professional knowledge.

16. I have not met or spoken with the Plaintiffs for purposes of this declaration. My opinions are based solely on the information I have been provided by Plaintiffs' attorneys, the materials referenced in the Bibliography as Exhibit B, and my experience studying gender dysphoria and in treating transgender patients.

17. I am being compensated \$350/hour for my time preparing this testimony. My compensation does not depend on the outcome of the litigation, the opinions I express, or the testimony I provide.

## **EXPERT OPINIONS**

### **A. Sex and Gender Identity**

18. The sex of a child is often determined after delivery based on the visual appearance of an infant's external genitals. Prenatal determination of sex is determined again by visualization of the fetus' external genitals on ultrasound. These methods are successful in assigning sex in an overwhelming majority of individuals. In transgender individuals, however, the sex determined at birth by these above methods does not accurately reflect the patient's sex.

19. Research has identified that determination of sex is far more complex than what is seen on genital exam. Instead, sex is a complex compilation of multiple factors including one's chromosomal make up (XX or XY, for example), gonadal sex (presence of ovaries or testes), fetal hormonal sex (production of sex hormones *by* the fetus or exogenous exposure of sex hormones *to* the developing fetus), pubertal hormonal sex (the change in hormonal milieu that results in the development of secondary sexual characteristics, such as facial hair and deep voice for those assigned male at birth, or breasts and menstrual cycles for those assigned female at birth), hypothalamic sex (variations in brain structure and function as a result of embryonal exposure of sex hormones), and gender identity.

20. For each of the above factors that contribute to the development of sex, there can be variations. Sex related characteristics do not always align as either completely male or completely female. For example, many children are born with ambiguous genitalia, and as a result it is difficult to assign these infants as either male or female at birth. These children often see multiple specialists throughout their lifespan for this Disorder of Sex Development (DSD). Other examples of DSDs are those of chromosomal differences. The typical human chromosomal make up includes 46XY for males and 46XX for females. However, in male patients with Klinefelter's

syndrome their chromosomal makeup is 47XXY. These chromosomal male individuals have an extra X chromosome. The results include breast development and small testes, in addition to other physical findings. Patients with Turner Syndrome are 45XO. These female individuals are missing an X chromosome, and as such many of them do not develop normal female puberty and are often infertile. These variations are common. The Monroe Carrell Children's Hospital at Vanderbilt has an entire clinic to cater to the medical needs of this patient population.

21. Gender identity is a person's inner sense of belonging to a particular gender. Identifying as male or female is a core component of one's overall identity. Every person has a gender identity. Research has shown that children begin to develop and express their gender identity during their toddler years, at around the age of 3 years old. It has a strong biological basis and cannot be changed.

22. A leading explanation for the biological basis of gender identity is the fact that a fetus' sexual organs develop in the first two months of pregnancy, while the sexual differentiation of the brain occurs in the second half of pregnancy. Rarely, this can result in situations where the sexual organs do not match the brain's sexual differentiation

23. The testes (male gonad) develop under the influence of a cascade of genes that begin with expression of the SRY gene present on the Y chromosome. Prior to this, the fetus has an "indifferent" gonad, one with the potential to develop into either a teste or an ovary. The presence of the SRY gene on the Y chromosome begins the differentiation for that indifferent gonad to become a teste. Soon after, the testes begin to produce testosterone that results in the formation of the scrotum and penis. Female gonads conversely develop in the absence of the SRY gene and that testosterone. This happens at around 7-8 weeks gestation.

24. Later, in the second half of pregnancy there is a testosterone surge that masculinizes the brain. The absence of this testosterone surge results in a feminine brain. The intrauterine spike in testosterone results in permanent organizing effects of the developing brain. Since this occurs at a time much later in gestation, it is possible that these two process (the differentiation of sexual organs and the sexual differentiation of the brain) occur independently of one another. During puberty, those circuits that have been developed in the womb, will then be activated by sex hormones.

25. One example of the effect of prenatal testosterone exposure is in the condition Congenital Adrenal Hyperplasia (CAH). Due to an enzyme deficiency, fetuses with typically female genitalia with CAH are exposed to high levels of intrauterine testosterone. These children tend of choose boy playmates, prefer boy's toys and exhibit behaviors more commonly associated with male children. It is no surprise that children with typically female genitalia born with CAH have a much higher chance of developing gender dysphoria when compared to children with typically female genitalia born without CAH (3% vs 0.003%).

26. Most people have a gender identity that matches the sex assigned at birth. Transgender people, however, have a gender identity that does not match the sex that they were assigned at birth.

27. According to a Williams Institute study in 2016, there are approximately 1.6 million people in the United States that identify as transgender. In this same study, it was revealed that an estimated 31,000 transgender people (or 0.6% of the state's population) live in the state of Tennessee. Tennessee is ranked 10th in the nation for its percentage of transgender individuals (Hawaii being the highest and North Dakota with the lowest).

28. Gender identity is innate, and cannot be voluntarily altered. Experts agree that being transgender is a normal variation of human development.

29. Moreover, given that gender identity is permanent and cannot be changed, attempts at changing one's gender identity have severe and often life threatening repercussions including major depression, anxiety, psychotic disorders and suicide. Therefore, the medical community at large believe this to be a futile and unethical treatment approach.

30. From a medical perspective, in the event that one's gender identity does not match their sex assigned at birth, i.e. in transgender people, one's gender identity should be the determining factor of their sex. The medical consensus recognizes that when one's sex-related characteristics are not in alignment, a person's gender identity is the determining factor, more important than the presence of their genitals, their chromosomal analysis, or their hormone levels.

31. It would be extremely harmful for a patient with ambiguous genitalia whose sex was incorrectly assigned at birth to be forced to maintain that incorrect determination legally and socially for the rest of that person's life. As such, since being transgender is a normal variation of development, one where sex is also incorrectly assigned at birth, it would be equally harmful and dangerous to force a person to legally remain encumbered by this incorrect assignment.

32. Therefore, from a social perspective, the appropriate determinant of a person's sex is that person's gender identity.

## **B. Gender Dysphoria and its Treatment**

33. Transgender people have a gender identity that differs from the sex that was assigned to them at birth.

34. This lack of alignment of assigned sex and gender identity can result in severe distress, depression, and anxiety. This constellation of symptoms is termed gender dysphoria.

35. Gender dysphoria is the medical diagnosis for the significant distress and/or problems functioning that result from the incongruity between various aspects of one's sex. It is a serious medical condition and it is codified in both the American Psychiatric Association's *Diagnostic and Statistical Manual*, Fifth Edition (DSM-5) and the World Health Organization's *International Classification of Diseases*, the diagnostic and coding compendia for mental health and medical professionals. People diagnosed with gender dysphoria have an intense and persistent discomfort with their birth-assigned sex.

36. The diagnostic criteria for Gender Dysphoria in the DSM-5 for adults and adolescents are twofold:

- a. A marked incongruence between one's experiences/expressed gender and assigned gender, of at least six months' duration, as manifested by at least two of the following:
  - i. A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics (or in younger adolescents, the anticipated secondary sex characteristics).
  - ii. A strong desire to be rid of one's primary and/or secondary sex characteristics because of a marked incongruence with one's experienced/expressed gender (or in younger adolescents, a desire to prevent the development of the anticipated secondary sex characteristics).
  - iii. A strong desire for the primary and/or secondary sex characteristics of the other gender.
  - iv. A strong desire to be of the other gender (or some alternative gender different from one's assigned gender).

- v. A strong desire to be treated as the other gender (or some alternative gender different from one's assigned gender).
  - vi. A strong conviction that one has the typical feelings and reactions of the other gender (or some alternative gender different from one's assigned gender).
- b. The condition is associated with clinically significant distress or impairment in social, occupational or other important areas of functioning.

37. The World Professional Association for Transgender Health (WPATH) is an international multi-specialty professional organization that publishes the widely adopted medical *Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People* ("WPATH Standards of Care").

38. The protocols and policies set forth by the WPATH Standards of Care are endorsed and cited as authoritative by many professional medical associations including the American Medical Association, the Endocrine Society, the American Psychological Association, the American Psychiatric Association, the American College of Obstetrics and Gynecology, the American Academy of Family Physicians, the American College of Physicians, and the World Medical Association, to name a few.

39. The WPATH Standards of Care highlight best practices in treating transgender persons or people suffering from gender dysphoria. As mentioned above, trying to change someone's gender identity through counseling, medications, or institutionalization is considered unethical and futile. Therefore, health care providers in both the mental health arena and medical arena work to bring a patient's body, appearance and lived experience into alignment with their

gender identity. The WPATH Standards of Care provides a framework or roadmap to help guide clinicians in this important work.

40. Treating gender dysphoria results in significant improvement in the quality of life, mental and physical health of transgender persons. Transgender people undergoing treatment for their gender dysphoria can live long, happy, productive and meaningful lives.

41. Gender transition for those that suffer from gender dysphoria is a lengthy process with multiple components. These components include social transition, medical transition, and surgical transition. Each transgender individual approaches transition differently, as the decision to undergo any aspect of transition is deeply personal and depends on the degree and type of dysphoria the patient is experiencing.

42. Notably, these treatments do not change a transgender person's sex, which is already determined by their gender identity.

43. The social transition is a formative aspect of a transgender person's experience. Social transition can include going by a different name, using different pronouns, or changing one's haircut, or clothing to match one's gender identity. Some transgender people opt to solely transition socially as there may be medical contraindications to medications or surgeries, or they may find that their gender dysphoria is treated with social transition alone.

44. One central aspect of social transition includes having one's personal documentation match their gender identity. To accomplish this, many transgender people legally change their names as part of this transition. Additionally, social transition includes having one's driver's license, passport, birth certificate, school or employee ID have the gender marker of the sex with which they identify. This allows the transgender individual to be legally recognized by their gender identity in all aspects of their life.

45. In addition to social transition, transgender individuals often interface with a healthcare setting for medical or surgical intervention. Medical transition often includes the prescription of hormones so that the transgender person can develop secondary sexual characteristics of the sex with which they identify. For example, a transgender woman (an individual assigned male at birth but who has a female gender identity) may be prescribed estrogen. This can result in breast development, softening of the skin, and changes in fat distribution from a more typically male pattern to a more typically female pattern. Alternatively, a transgender man (or someone assigned female at birth with a male gender identity) may be prescribed testosterone. This could result in a deeper voice, facial and body hair growth. This process is generally monitored under close supervision with medical professionals, including office visits and laboratory monitoring.

46. Some transgender patients seek surgical transition. Surgical treatment can include facial plastic surgery to allow for more traditionally feminine features, breast augmentation, or the creation of a vagina (procedure referred to as vaginoplasty) for transgender women. Transgender men are often interested in a mastectomy for the removal of breast tissue for a more masculine appearing chest. Genital surgery for men include the creation of a penis, often created from tissue from the patient's forearm or thigh. Not all transgender patients obtain surgery. Specifically, a small minority of transgender patients pursue genital surgeries. This is for a variety of reasons. For example, some patients may have chronic medical problems that would otherwise preclude them from having surgery, such as cancer, heart disease, poorly controlled diabetes, or advanced HIV to name a few. Some patients are financially unable to obtain surgery as they are either uninsured or have insurance policies that refuse to pay for gender affirming surgeries. Lastly, surgical

intervention may not be medically indicated for some patients, as their gender dysphoria is appropriately treated with social or hormonal transition alone.

47. Given that many transgender individuals do not undergo a surgical sex reassignment procedure, this should not be a determining factor in an individual's pursuit to change their legal documentation to reflect their true sex, consistent with their gender identity, such as on their driver's license or birth certificate.

### **C. The Importance of Accurate Identity Documentation for the Transgender Individual**

48. Identity documentation is required in all aspects of our lives. From applying for health insurance, to enrolling our children in school, to getting on an airplane, to applying for a credit card or a marriage license. Our documentation allows us to move through this world safely and legally.

49. Transgender people often desire to change their names legally and the gender markers on their legal documentation as part of their social transition.

50. When a transgender person's legal documentation does not accurately reflect their identity, that transgender person is at risk for workplace discrimination, housing discrimination, voting discrimination, health care discrimination and even violence.

51. For example, according to a 2015 study, approximately one-third of individuals who have shown identification documents with a name or gender that did not match their gender presentation reported negative experiences, such as being harassed, denied services, and/or attacked. More specifically, as a result of showing an identification document with a name or gender that did not match their gender presentation, 25% of people were verbally harassed, 16% were denied services or benefits, 9% were asked to leave a location or establishment, and 2% were assaulted or attacked.

52. In addition, a person's gender dysphoria can worsen if the person legally cannot complete their social transition. Gender dysphoria can worsen if a transgender person has discordant documentation, where some documents accurately reflect their gender identity and others do not.

53. This can affect patients in a variety of ways, and my patients have reported several negative downstream ramifications from incorrect documentation. For example, a student applying to college may not get assigned appropriate and safe housing if their legal documentation is incorrect or incongruent. This could lead to significant anxiety about changing, bathing, and even safety, so much so that transgender youth may opt out of applying to college altogether. A transgender woman with incorrect documentation may be unable to stay in a women's homeless shelter forcing her to feel unsafe and at risk for violence in an all men's shelter or, worse, on the street.

54. My patients frequently report the challenges they face at the pharmacy filling prescriptions, going to the DMV, or talking to their health insurance companies. All of these are daily examples of how an ordinarily routine task for a non-transgender person (also called cisgender) can be anxiety provoking and isolating for a transgender individual.

55. Transgender people may feel that they are unable to participate in their communities, neighborhoods, schools or jobs without having documentation that reflects their gender identity. This can further lead to social isolation and worsening gender dysphoria.

56. A 2015 Canadian study demonstrated that having one or more identity documents concordant with gender identity was statistically significantly associated with reduced suicidal ideations and attempts. Based on this study's results, for every 1,000 people whose identity

documents are correct, 90 episodes of suicidal ideation and 20 suicide attempts would be prevented over the course of one year. (Bauer, G.R. et al).

57. As mentioned above, the World Professional Association for Transgender Health is the leading professional body with which almost all other professional medical bodies align.

58. In the WPATH Identity Recognition Statement published in 2017, it is written:

“The World Professional Association for Transgender Health (WPATH) recognizes that, for optimal physical and mental health, persons must be able to freely express their gender identity, whether that identity conforms to the expectations of others. WPATH further recognizes the right of all people to identity documents consistent with their gender identity, including those documents which confer legal gender status. Such documents are essential to the ability of all people to enjoy rights and opportunities equal to those available to others; access accommodation, education, employment, and health care; travel; navigate everyday transactions; and to enjoy safety. Transgender people, regardless of how they identify or appear, should enjoy the gender recognition all persons expect and deserve. Medical and other barriers to gender recognition for transgender individuals may harm physical and mental health. WPATH opposes all medical requirements that act as barriers to those wishing to change legal sex or gender markers on documents. These include requirements for diagnosis, counseling or therapy, puberty blockers, hormones, any form of surgery (including that which involves sterilization), or any other requirements for any form of clinical treatment or letters from doctors . . . . Further, court and judicial hearings can produce psychological, financial and logistical barriers to legal gender change, and may also violate personal privacy rights or needs.”

59. As a member of WPATH, and as a physician that cares for transgender individuals every day, I agree with the above statement.

60. A patient’s right to privacy includes what they choose to do with their own documentation.

61. Having inconsistent or gender incongruent documentation can worsen the severity of gender dysphoria by limiting an individual’s ability to enjoy the rights and opportunities equal to those around them.

62. Aside from intentionally trying to discriminate against transgender people and infringing on their rights to privacy, I can think of no other plausible reason why the State of

Tennessee would refuse to change a person's gender marker on their birth certificate. As estimated by the Williams Institute, there are roughly 31,000 transgender people living in the state of Tennessee which is composed of 6.77 million people (United States Census Bureau). Even if every transgender Tennessean took advantage of changing their birth certificates, the likelihood that it would have any statistically relevant impact on the state's vital statistics is slim to nonexistent.

63. Additionally, there are 48 states in the United States (as well as DC and Puerto Rico) that allow transgender individuals to correct their birth certificates in a manner consistent with their gender identity. These states and other jurisdictions have the same interests in ensuring accurate vital statistics records as Tennessee, and yet they have determined that the overall impact of allowing transgender people to correct the sex designation on their birth certificates was insignificant for the state and did not negatively affect the states' interests in ensuring accurate and useful vital statistics records.

64. Moreover, to the extent the State of Tennessee needs data regarding the sex assigned at birth to persons born in the state, such data can easily be preserved by maintaining such records under seal and without requiring transgender people born in Tennessee to have birth certificates (an identification) that are inconsistent with their gender identity.

### **CONCLUSIONS**

65. From a purely medical and scientific understanding, gender identity is the appropriate, determinative factor for selecting male or female gender markers on identity documents. Moreover, there is also a clinical imperative that gender identity be used to make that determination.

66. Transgender men are men and therefore should be identified as men for the purposes of all identity documents including their birth certificate. Transgender women are women

and therefore should be identified as women for the purposes of their identity documents including their birth certificate. This intervention improves the lives of transgender people, decreasing their risk of suicide.

67. Allowing a transgender person the right to change their documentations has very little impact on the state of Tennessee; however, it has an extremely significant impact in the lives of transgender Tennesseans. The decision, therefore, is a simple one.

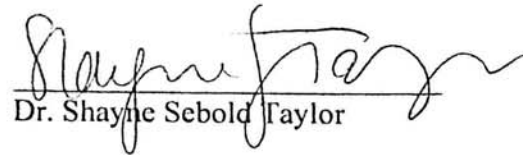
//

//

//

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated this 29 day of February, 2020.

 MB  
Dr. Shayne Sebold Taylor

## Exhibit A – Curriculum Vitae

**Shayne Sebold Taylor, M.D.**  
***Curriculum Vitae***

<i>Contact Information:</i>	Office Address:	Vanderbilt Internal Medicine and Pediatrics 7069-B Highway 70S Nashville, TN 37221
	Office Phone:	(615) 538-3668
	Email Address:	shayne.s.taylor@vumc.org

**EDUCATION**

**Undergraduate:**

EMORY UNIVERSITY, Atlanta, GA  
Degree: Bachelor of Science in Biology and  
Bachelor of the Arts in Women and Gender Studies  
Dates: August 2006 – May 2009

CONNECTICUT COLLEGE, New London, CT  
Dates: August 2005 – May 2006

**Professional or Graduate School:**

DREXEL UNIVERSITY COLLEGE OF MEDICINE, Philadelphia, PA  
Degree: Doctor of Medicine  
Dates: August 2010 – May 2014

**Postgraduate Training:**

VANDERBILT UNIVERSITY, Nashville, TN  
Internal Medicine & Pediatrics Internship & Residency Program  
Dates: July 2014 – August 2018

**LICENSURE AND CERTIFICATION**

- |   |                      |
|---|----------------------|
| • TN Medical License (# 55151)                            | 1/14/2016-09/30/2020 |
| • Board Certification American Board of Pediatrics        | 10/2018              |
| • Board Certification American Board of Internal Medicine | 08/2019              |

**ACADEMIC APPOINTMENTS**

Assistant Professor of Medicine  
VANDERBILT UNIVERSITY SCHOOL OF MEDICINE, Nashville, TN  
August 2018 – present

## HOSPITAL APPOINTMENTS

Active Medical Staff

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE, Nashville, TN

August 2018 – present

## PROFESSIONAL ORGANIZATIONS

- American Academy of Pediatrics (AAP)
- American College of Physicians (ACP)
- Alpha Omega Alpha (AOA)
- Cumberland Pediatrics Foundation (CPF)
- National Med-Peds Residency Association (NMPRA)
- Gay and Lesbian Medical Association (GLMA)
- World Professional Association for Transgender Health (WPATH)

## PROFESSIONAL ACTIVITIES

- Drexel University College of Medicine
  - Women's Health Scholar, 2010-2011
  - Humanities Health Scholar, 2010-2011
  - Summer for Reproductive Health at the University of Groningen, Netherlands, Summer 2011
  - Drexel Univ. College of Medicine Admissions Committee Member, 2011-2012
  - Honor Court Member, 2012-2014
  - Basic Science Tutor, 2012-2014
  - Indian Health Services Rotation, September 2013
  - Medical Students for Choice Member and President, 2010-2014
- Vanderbilt University, Med-Ped Residency Program
  - Physicians for Reproductive Health Board Member, 2014-2017
  - LGBTI Health Provider, 2015-present
  - World Professional Association for Transgender Health (WPATH) Conference Attendee, February 2016
  - Nexplanon Resident Education Organizer, 2016-2017
  - Vanderbilt Gender Clinic Committee Member, 2016-present
  - Page Campbell Moonlighter, 2016-2018
  - Bioethics Certificate Program Participant, 2017-2018
  - Med-Peds Wellness Chief, 2017-2018

## AWARDS AND SPECIAL RECOGNITION

- Writer's Award from The Emory University President's Commission on the Status of Women, "*Young Venuses and Old Hags: a feminist critique on the media's portrayal of aging women*," 2009
- Pathology Honor Society at Drexel University, 2010

- The Lila Kroser Scholarship at Drexel University, 2013
- The Drexel University Peer Commendation for Professional Behavior, 2014
- Alpha Omega Alpha, Drexel University College of Medicine, 2014

## TEACHING ACTIVITIES

- Creator for the LGBTQ Health Curriculum for Residents, 2017-present
- Research mentor to Mollie Limb, VUSM student, 2018-present
- QI research mentor to Kalin Wilson, VUSM student, 2018-present
- Faculty partner with Internal Medicine Residency Social Medicine Club 2019
- Contributor to Internal Medicine Resident Handbook 2019

## PUBLICATIONS AND PRESENTATIONS

### Presentations:

“Caring for the Transgender Patient: With little evidence, but a lot of love.” Vanderbilt University Division of Infectious Disease Grand Rounds and Division of General Internal Medicine Grand Rounds, 4/4/2019 and 5/22/2019.

“A Primer for Transgender Health.” Southeast/TN AIDS Education and Training Center, webcast 1/30/2019.

“The Clinic for Transgender Health: A Passion Project for our Patients.” Vanderbilt University Program for LGBTQ Health Grand Rounds, 11/14/2018.

“Caring for the Transgender Patient.” Vanderbilt University School of Nursing, 10/23/19.

### Articles in Refereed Journals:

**Taylor, S.S.**, Ehrenfeld, J.M. “Electronic Health Records and Preparedness: Lessons from Hurricanes Katrina and Harvey” Journal of Medical Systems. (2017) 41:173.

Gamble, R, **Taylor SS**, Ehrenfeld J.M., Huggins, A. “Trans-specific Geriatric Health Assessment (TGHA): An inclusive clinical guideline for the geriatric transgender patient in a primary care setting.” Maturitas, Volume 132, 70 – 75.

## RESEARCH PROJECTS

Healthcare Needs and Barriers Among New Patients at a Clinic for Transgender Health  
IRB NUMBER: 192299  
PI: Shayne Taylor

## Exhibit B – Bibliography

## **BIBLIOGRAPHY**

1. American Academy of Family Physicians. (2016, September 16). *AAFP reaffirms antidiscrimination policy with vote on transgender equality*. <https://www.aafp.org/media-center/releases-statements/all/2016/transgender-equality.html>.
2. American College of Obstetricians and Gynecologists. (2011). *Committee opinion: Health care for transgender individuals*. <https://www.acog.org/-/media/Committee-Opinions/Committee-on-Health-Care-for-Underserved-Women/co512.pdf?dmc=1>
3. American Medical Association. (2016). *Health care needs of lesbian, gay, bisexual, transgender, and queer populations H-160.991*. <https://policysearch.ama-assn.org/policyfinder/detail/transgender?uri=%2FAMADoc%2FHOD.xml-0-805.xml>
4. American Medical Association. (2017). *Access to basic human services for transgender individuals H-65.964*. <https://policysearch.ama-assn.org/policyfinder/detail/transgender?uri=%2FAMADoc%2FHOD.xml-H-65.964.xml>
5. American Psychiatric Association. (2013). Gender dysphoria. In *Diagnostic and statistical manual of mental disorders (5th ed.)*. <https://doi.org/10.1176/appi.books.9780890425596.dsm14>
6. American Psychological Association. (2015). Guidelines for psychological practice with transgender and gender nonconforming people. *American Psychologist*, 70, 832-864. <https://www.apa.org/practice/guidelines/transgender.pdf>
7. Auyeung, B., Baron-Cohen, S., Ashwin, E., Knickmeyer, R., Taylor, K., Hackett, G., & Hines, M. (2009). Fetal testosterone predicts sexually differentiated childhood behavior in girls and in boys. *Psychological Science*, 20(2), 144-148. <https://doi.org/10.1111/j.1467-9280.2009.02279.x>
8. Bao, A.-M., & Swaab, D. F. (2010). Sex differences in the brain, behavior, and neuropsychiatric disorders. *The Neuroscientist*, 16(5), 550-565. <https://doi.org/10.1177/1073858410377005>
9. Bauer, G. R., Scheim, A. I., Pyne, J., Travers, R., & Hammond, R. (2015). Intervenable factors associated with suicide risk in transgender persons: A respondent driven sampling study in Ontario, Canada. *BMC Public Health*, 15. <https://doi.org/10.1186/s12889-015-1867-2>
10. Becker, J. V., & Perkins, A. (2014). Gender Dysphoria. In R. E. Hales, S. C. Yudofsky, & L. W. Roberts (Eds.), *Textbook of Psychiatry* (6th ed.) (pp. 679-702). American Psychiatric Publishing, American Psychiatric Association. <https://doi.org/10.1176/appi.books.9781585625031.rh21>
11. Berenbaum, S. A., & Beltz, A. M. (2011). Sexual differentiation of human behavior: Effects of prenatal and pubertal organizational hormones. *Frontiers in Neuroendocrinology*, 32(2), 183-200. <https://doi.org/10.1016/j.yfrne.2011.03.001>

12. Bradley, S. J., Oliver, G. D., Chernick, A. B., Zucker, K. J. (1998). Experiment of nurture: Ablatio penis at 2 months, sex reassignment at 7 months, and a psychosexual follow-up in young adulthood. *Pediatrics*, 102(1), 1-5.  
<https://doi.org/10.1542/peds.102.1.e9>
13. Byne, W., Karasic, D. H., Coleman, E., Eyler, A. E., Kidd, J. D., Meyer-Bahlburg, H. F. L., . . . Pula, J. (2018). Gender dysphoria in adults: An overview and primer for psychiatrists. *Transgender Health*, 3(1), 57-70. <https://doi.org/10.1089/trgh.2017.0053>
14. Daniel, H., & Butkus, R. (2015). Lesbian, gay, bisexual, and transgender health disparities: Executive summary of a policy position paper from the American College of Physicians. *Annals of Internal Medicine*, 163(2), 135-137.  
<https://doi.org/10.7326/M14-2482>
15. Davidson, M. (2007). Seeking refuge under the umbrella: Inclusion, exclusion, and organizing within the category Transgender. *Sexuality Research & Social Policy*, 4, 60-80. <https://doi.org/10.1525/srsp.2007.4.4.60>
16. Dessens, A. B., Slijper, F. M. E., & Drop, S. L. S. (2005). Gender dysphoria and gender change in chromosomal females with congenital adrenal hyperplasia. *Archives of Sexual Behavior*, 34, 389-397. <https://doi.org/10.1007/s10508-005-4338-5>
17. Diamond, M., & Sigmundson, H. K. (1997). Sex reassignment at birth: Long-term review and clinical implications. *Archives of Pediatrics and Adolescent Medicine*, 151(3), 298-304. <https://doi.org/10.1001/archpedi.1997.02170400084015>
18. Dittmann, R. W., Kappes, M. E., & Kappes, M. H. (1992). Sexual behavior in adolescent and adult females with congenital adrenal hyperplasia. *Psychoneuroendocrinology*, 17(2-3), 153-170. [https://doi.org/10.1016/0306-4530\(92\)90054-B](https://doi.org/10.1016/0306-4530(92)90054-B)
19. Drescher, J., Haller, E., & Yarbrough, E. (2018). *Position statement on access to care for transgender and gender diverse individuals*. Caucus of LGBTQ Psychiatrists and the Council on Minority Mental Health and Health Disparities, American Psychiatric Association. <http://aglp.org/APAPositionStatements/Position-2018-Access-to-Care-for-Transgender-and-Gender-Diverse-Individuals.pdf>
20. Drescher, J., & Haller, E. (2012). *Position statement on access to care for transgender and gender variant individuals*. Caucus of Lesbian, Gay and Bisexual Psychiatrists, American Psychiatric Association.  
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.692.7501&rep=rep1&type=pdf>
21. Ehrhardt, A. A., Meyer-Bahlburg, H. F. L., Feldman, J. F., & Ince S.E. (1984). Sex-dimorphic behavior in childhood subsequent to prenatal exposure to exogenous progestogens and estrogens. *Archives of Sexual Behavior*, 13, 457-477.  
<https://doi.org/10.1007/BF01541430>
22. Fisher, A. D., Ristori, J., Morelli, G., & Maggi, M. (2018). The molecular mechanisms of sexual orientation and gender identity. *Molecular and Cellular Endocrinology*, 467, 3-13. <https://doi.org/10.1016/j.mce.2017.08.008>

23. Flores, A. R., Herman, J. L., Gates, G. J., & Brown, T. N. T. (2016). *How many adults identify as transgender in the United States?* The Williams Institute. <https://williamsinstitute.law.ucla.edu/wp-content/uploads/How-Many-Adults-Identify-as-Transgender-in-the-United-States.pdf>
24. Gaetano, P. (2017, November 15). *David Reimer and John Money gender reassignment controversy: The John/Joan case*. The Embryo Project Encyclopedia. <https://embryo.asu.edu/pages/david-reimer-and-john-money-gender-reassignment-controversy-johnjoan-case>.
25. Garcia-Falgueras, A., & Swaab, D. F. (2008). A sex difference in the hypothalamic uncinate nucleus: Relationship to gender identity. *Brain*, 131(12), 3132-3146. <https://doi.org/10.1093/brain/awn276>.
26. Gómez-Gil, E., Zubiaurre-Elorza, L., Esteva, I., Guillamon, A., Godás, T., Almaraz, M. C., . . . Salamero, M. (2012). Hormone-treated transsexuals report less social distress, anxiety and depression. *Psychoneuroendocrinology*, 37(5), 662-670. <https://doi.org/10.1016/j.psyneuen.2011.08.010>
27. Gomez-Lobo, V. (2014). Multidisciplinary care for individuals with disorders of sex development. *Current Opinion in Obstetrics and Gynecology*, 26(5), 366-371. <https://doi.org/10.1097/GCO.0000000000000101>
28. Grady, D. (2018, October 22). Anatomy does not determine gender, experts say. *The New York Times*. <https://www.nytimes.com/2018/10/22/health/transgender-trump-biology.html>
29. Hembree, W. C., Cohen-Kettenis, P. T., Gooren, L., Hannema, S., Meyer, W. J., Murad, M. H., . . . T'Sjoen, G. G. (2017). Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guideline. *The Journal of Clinical Endocrinology & Metabolism*, 102(11), 3869-3903. <https://doi.org/10.1210/jc.2017-01658>
30. Hines, M. (2011). Gender Development and the human brain. *Annual Review of Neuroscience*, 34, 69-88. <https://doi.org/10.1146/annurev-neuro-061010-113654>
31. Hines, M., Constantinescu, M., & Spencer, D. (2015). Early androgen exposure and human gender development. *Biology of Sex Difference*, 6, Article 3. <https://doi.org/10.1186/s13293-015-0022-1>
32. James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The report of the 2015 U.S. transgender survey*. National Center for Transgender Equality. <https://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF>
33. Jürgensen, M., Hiort, O., Holterhus, P.-M., & Thyen, U. (2007). Gender role behavior in children with XY karyotype and disorders of sex development. *Hormones and Behavior*, 51(3), 441-453. <https://doi.org/10.1016/j.yhbeh.2007.01.001>
34. Karkanaki, A., Praras, N., Katsikis, I., Kita, M., & Panidis, D. (2007). Is the Y chromosome all that is required for sex determination? *Hippokratia*, 11(3), 120-123.

35. Wu, K. J. (2016). Between the (gender) lines: the science of transgender identity. *Science in the News at the Harvard Graduate School of the Arts and Sciences*. <http://sitn.hms.harvard.edu/flash/2016/gender-lines-science-transgender-identity/>
36. Kruijver, F. P.M., Zhou, J.-N., Pool, C. W., Hofman, M. A., Gooren, L. J. G., & Swaab, D. F. (2000). Male-to-female transsexuals have female neuron numbers in a limbic nucleus. *The Journal of Clinical Endocrinology & Metabolism*, 85(5), 2034-2041. <https://doi.org/10.1210/jcem.85.5.6564>
37. Kuiri-Hänninen, T., Seuri, R., Tyrväinen, E., Turpeinen, U., Hämäläinen, E., Stenman, U.-H., . . . Sankilampi, U. (2011). Increased activity of the hypothalamic-pituitary-testicular axis in infancy results in increased androgen action in premature boys. *The Journal of Clinical Endocrinology & Metabolism*, 96(1), 98-105. <https://doi.org/10.1210/jc.2010-1359>
38. Lang, N. (2016, March 31). *For trans Americans, changing your name can still be a matter of life or death*. Quartz. <https://qz.com/651310/for-trans-americans-changing-your-name-can-still-be-a-matter-of-life-or-death/>
39. Meerwijk, E. L., & Sevelius, J. M. (2017). Transgender population size in the United States: A meta-regression of population-based probability samples. *American Journal of Public Health*, 107(2), e1-e8. <https://doi.org/10.2105/AJPH.2016.303578>
40. Meyer-Bahlburg, H. F.L., Gruen, R. S., New, M. I., Bell, J. J., Morishima, A., Shimshi, M., . . . Baker, S. W. (1996). Gender change from female to male in classical congenital adrenal hyperplasia. *Hormones and Behavior*, 30(4), 319-332. <https://doi.org/10.1006/hbeh.1996.0039>
41. National Center for Transgender Equality. (2017). *2015 U.S. transgender survey: Tennessee state report*. <https://www.transequality.org/sites/default/files/docs/usts/USTSTNStateReport%281017%29.pdf>
42. Rodeck, C.H., Gill, D., Rosenberg, D.A., & Collins, W.P. (1985). Testosterone levels in midtrimester maternal and fetal plasma and amniotic fluid. *Prenatal Diagnosis*, 5(3), 175-181. <https://doi.org/10.1002/pd.1970050303>
43. Roselli, C. E. (2018). Neurobiology of gender identity and sexual orientation. *Journal of Neuroendocrinology*, 30(7), Article e12562. <https://doi.org/10.1111/jne.12562>
44. Rosendale, N., Goldman, S., Ortiz, G. M., & Haber, L. A. (2018). Acute clinical care for transgender patients: A review. *JAMA Internal Medicine*, 178(11), 1535-1543. <https://doi.org/10.1001/jamainternmed.2018.4179>
45. Safer, J. D., Coleman, E., Feldman, J., Garofalo, R., Hembree, W., Radix, A., & Sevelius, J. (2016). Barriers to healthcare for transgender individuals. *Current Opinion in Endocrinology, Diabetes, and Obesity*, 23(2), 168-171. <https://doi.org/10.1097/MED.0000000000000227>
46. Safer, J. D., & Tangpricha, V. (2019). Care of the transgender patient. *Annals of Internal Medicine*, 171(1), ITC1-ITC16. <https://doi.org/10.7326/AITC201907020>

47. Savic, I., Garcia-Falgueras, A., & Swaab, D. F. (2010) Chapter 4 – Sexual differentiation of the human brain in relation to gender identity and sexual orientation. *Progress in Brain Research*, 186, 41-62. <https://doi.org/10.1016/B978-0-444-53630-3.00004-X>
48. Schneider, M., Bockting, W. O., Ehrbar, R. D., Lawrence, A. A., Rachlin, K., & Zucker, K. J. (2009). *Report of the APA Task Force on Gender Identity and Gender Variance*. <https://www.apa.org/pi/lgbt/resources/policy/gender-identity-report.pdf>
49. Substance Abuse and Mental Health Services Administration. (2015). *Ending conversion therapy: Supporting and affirming LGBTQ youth* (HHS Publication No. (SMA) 15-4928). U.S. Department of Health and Human Services. <https://store.samhsa.gov/system/files/sma15-4928.pdf>
50. Turban, J. L., Beckwith, N., Reisner, S. L., & Keuroghlian, A. S. (2020). Association between recalled exposure to gender identity conversion efforts and psychological distress and suicide attempts among transgender adults. *JAMA Psychiatry*, 77(1), 68-76. <https://doi.org/10.1001/jamapsychiatry.2019.2285>
51. Valentine, S. E., & Shipherd, J. C. (2018). A systematic review of social stress and mental health among transgender and gender non-conforming people in the United States. *Clinical Psychology Review*, 66, 24-38. <https://doi.org/10.1016/j.cpr.2018.03.003>
52. White Hughto, J. M., & Reisner, S. L. (2016). A systematic review of the effects of hormone therapy on psychological functioning and quality of life in transgender individuals. *Transgender Health*, 1(1), 21-31. <https://doi.org/10.1089/trgh.2015.0008>
53. Witchel, S. F. (2018). Disorders of sex development. *Best Practice & Research Clinical Obstetrics & Gynaecology*, 48, 90-102. <https://doi.org/10.1016/j.bpobgyn.2017.11.005>
54. World Health Organization. (2016). F64: Gender identity disorders. In *International statistical classification of diseases and related health, 10th revision*. <https://icd.who.int/browse10/2016/en#/F60-F69>
55. World Medical Association. (2017, February 17). *WMA statement on transgender people*. <https://www.wma.net/policies-post/wma-statement-on-transgender-people/>
56. World Professional Association for Transgender Health. (2011). *Standards of care for the health of transsexual, transgender, and gender nonconforming people, 7th version*. Retrieved January 21, 2020, from <https://www.wpath.org/publications/soc>
57. World Professional Association for Transgender Health. (2017, November 15). *WPATH Identity Recognition Statement*. Retrieved January 22, 2020, from <https://www.wpath.org/media/cms/Documents/Web%20Transfer/Policies/WPATH%20Identity%20Recognition%20Statement%2011.15.17.pdf>
58. Zhou, J.-N., Hofman, M. A., Gooren, L. J., & Swaab, D. F. (1995). A sex difference in the human brain and its relation to transsexuality, *Nature*, 378, 68-70. <https://doi.org/10.1038/378068a0>